

WHAT IS CLAIMED IS:

1. A method for performing at least one of fault diagnosis and reprogramming control information in a vehicle control unit in which i) messages stored in a memory area are transferred via an interface to a diagnostic handset that is operable within a range of 100 m around the vehicle, particular messages being selected from a total set of messages, and diagnostic information created for vehicle components based on the particular messages; ii) the particular messages are transferred to the diagnostic handset via a wireless interface; iii) a standard vehicle diagnostic interface has a data protocol converter connected to it, which converts the particular messages from a first vehicle data-bus protocol, unknown to the diagnostic handset, into a further data format, for subsequent transfer to the diagnostic handset via the interface using the further data format; and iv) the diagnosis is taken as a basis for transferring particular data for reprogramming the vehicle to a memory area in the vehicle control unit via the interface; wherein:

the particular data transferred to the vehicle control unit include at least one of software for improved operation of individual components in the vehicle, parameters for improved component operation

and a hardware description relating to the hardware configuration of reconfigurable hardware;

transferred software or hardware description data are provided from the diagnostic handset directly to the vehicle via the wireless interface; and

the particular messages are also converted in the data protocol converter from a first message protocol for one vehicle data bus into a message protocol for another vehicle data bus.

2. The method according to Claim 1, wherein wireless transfer of data between the control unit and the diagnostic handset is performed according to the Bluetooth standard.

3. The method according to Claim 1, wherein data are transferred from the control unit to the data protocol converter via a first data bus.

4. A data protocol converter for a vehicle, said data protocol converter having two interfaces, a first one of which interfaces is connectable to a standard vehicle diagnostic interface, and a second one of

which interfaces is adapted to permit wireless message transfer via a diagnostic handset; wherein:

a data protocol translator converts messages from the standard diagnostic interface in the vehicle into messages having a wireless data format, so that the messages can be received in the diagnostic handset using the latter's wireless interface;

the data protocol converter has a further interface via which it is connectable to a second standard diagnostic interface according to a different standard; and

the data protocol translator converts the messages from the second standard diagnostic interface in the vehicle into messages having a wireless data format.

5. The data protocol converter according to Claim 4, wherein the wireless interface converts diagnostic data into Bluetooth standard, so that the diagnostic data can be displayed on a portable computer programmed specifically for this purpose.

6. The data protocol converter according to Claim 4, wherein the data protocol translator permits transfer of messages from the diagnostic handset to the vehicle.

7. The data protocol converter according to Claim 4, further comprising interfaces to a CAN data bus and to a J1850 data bus.

8. The data protocol converter according to Claim 4, wherein the data protocol converter can be retrofitted onto the standard diagnostic interface provided in the means of transport in the manner of an adapter, and allows data transfer from the control unit to the diagnostic handset and also allows transfer of the data directly from one data bus to a further data bus.